

DISCRIMINATING AMONG SUBGROUPS OF BORDERLINE PERSONALITY DISORDER: AN ASSESSMENT OF OBJECT REPRESENTATIONS

Gerald Tramantano, Rafael Art. Javier, and Mirna Colon

The purpose of this study was to identify subgroups of borderline personality disorder (BPD) by examining internalized object relations. It was predicted: (a) that the internalized object relations of borderline patients as a group can be differentiated from psychiatric patients (comparison group $N = 15$), and (b) that BPD subgroups significantly differ in their object-relational profiles. Fifty-seven adult borderline subjects (28 male and 29 female) were separated into three groups based on Horney's description of interpersonal styles (moving away, against, and toward). Object relations were assessed using the Bell Object Relations Inventory and from early memories. Four written early memories were scored using the Social Cognition and Object Relations Scale (SCORS). The results suggest that the malevolent inner object world of borderline patients is fundamentally different from nonborderline psychiatric patients; and that the defined BPD subgroups of moving toward, against, and away differed significantly on specific structural and thematic object-relational dimensions. Aspects from Fairbairn's object relations theory and contributions from the self/representational, ego deficit, and Kernberg's models of borderline psychopathology are used to help interpret the findings. Identifying subtypes of BPD may allow for more precise discriminations in separating BPD from other disorders and may provide meaningful therapeutic and prognostic information for the different subgroups of borderline patients.

KEY WORDS: borderline assessment; assessment of object representations.

Psychological assessment of the intrapsychic structure of borderline conditions has been of great importance to clinicians and theorists interested in the differentiation of borderline psychopathology from its neurotic and psychotic counterparts (Chessick, 1974; Frosch, 1967; Kernberg, 1975, 1976; Masterson and Rinsley, 1975; Stone, 1980). Although, Kernberg and Masterson have introduced some theoretical clarity to the borderline diagnosis, researchers and clinicians continue to search for the best way to assess the borderline conditions. Part of the complications faced by these researchers had to do with the fact that borderline symptomatology is complex and affects borderline individuals differently. Although there are some indications that borderlines can be distinguishable from other psychiatric condi-

The authors are affiliated with St. John's University, Jamaica, NY.

Address correspondence to Gerald Tramantano, Ph.D., 62 Twinbrooks Trail, Chester, NJ 07930.

tions using psychological testing (Gartner, Hart, and Gartner, 1989), distinguishing among the different borderline subgroups has been more problematic (Grinker, Werble, and Drye, 1968; Urist, 1977; Westen, Ludolph, Silk, et al., 1990). This latter challenge is the focus of the present investigation.

It is our contention that aspects of the following theoretical formulations of Horney (1945), Fairbairn (1952), Kernberg (1975), and Masterson (1975) can be utilized to interpret the data and support the clinical utility of subgrouping BPD. Unlike previous studies, and in keeping with the richness and complexity of the description of the borderline symptomatology, the present investigation objectively examines the multidimensional attributes of the BPD patient's object representation. Delineating various components of object relations that identifies subtypes of BPD may lead to the discovery that separate etiologies exist for each subgroup. Ultimately, different psychoanalytic remedial techniques could be utilized or developed for the various subtypes contained within this broad group of character-disordered patients.

In order to understand the complexity surrounding research on borderlines, it is important to review some of the problems researchers have confronted in this regard. We then discuss our multidimensional approach. We believe such an object relations diagnostic approach allows for a better and more sensitive assessment tool for distinguishing among the different borderline subgroups.

PROBLEMS IN ASSESSING BORDERLINES

Researchers in object relations assessment have attempted to define BPD by examining the multidimensional attributes of the borderline's internalized object relations (Blatt, Brennis, Schimek, and Glick, 1976; Blatt and Lerner, 1983; Mayman, 1968; Urist, 1977). In the late 1970s, Blatt et al. (1976) developed the Developmental Analysis of the Concept of the Object Scale (DACOS), using the human figure response from the Rorschach, to assess the degree of accuracy, differentiation, articulation, motivation and content of action, and integration of a patient's internal representations. By using this scale with the Rorschach, many researchers attempted to differentiate borderline from other diagnostic categories (Farris, 1988; Gartner et al., 1989; Lerner and Lerner, 1983; Lerner and St. Peter, 1984; Spear, 1980; Spear and Lapidus, 1981; Spear and Sugarman, 1984; Stuart et al., 1990).

In general, the DACOS is a helpful tool in differential psychiatric diagnosis. However, it primarily assesses the structural (cognitive) attributes of object relationships and leaves other affective elements relatively untouched. These affective attributes may be the most important contributing factor when assessing BPD patients.

Another problem that researchers interested in assessing borderline symptomatology often confront is the fact that borderline patients tend to construe their object world in a cognitively sophisticated manner. For instance, they may describe their interpersonal world in richly developed intellectualized concepts. That is, cognitively, some borderline patients may experience relationships with others in a manner that is similar to neurotic representations. Stuart and his associates suspect that some researchers have mistakenly taken this characteristic as an index of object-relational sophistication. However, borderline object relations paradigms have been found to be fraught with malevolence. Neither normals nor depressives experience relationships with such gloom and pessimism (Stuart et al., 1990). The attribution of malevolent intent is what profoundly discolors the borderline's object world. It is in this context that Westen (1990) attempted to define object relations assessment more comprehensively as a way to measure psychological processes (cognitive, affective, and motivational) that registers and organizes mental representations of the self and others.

In an attempt to deal with problems associated with studying BPD and in keeping with Westen's (1990) definition, some investigators (Spear, 1980; Spear and Lapidus, 1981; Spear and Sugarman, 1984) sought to combine the DACOS with scales that measure thematic (affective) levels of object representations, such as the Krohn and Mayman (1974) Object Representation Scale for Dreams (ORSCD) and Urist's (1977) Mutuality of Autonomy Scale. These measures assess object relationships along a continuum that ranges from primitive (isolation, loneliness, and/or malevolent interactions) to more advanced themes (intimacy, emotional sharing, and mutuality of relations). Using a multidimensional object relations assessment, these investigators were able to identify three groups of patients: obsessive-paranoid borderlines, hysterical-impulsive borderlines, and undifferentiated schizophrenics. They found that the structural measure (DACOS) successfully distinguished the combined borderline group from the schizophrenic group, but failed to distinguish between the two types of borderline patients. They interpreted this finding in support of Kernberg's emphasis that borderline pathology is a structural diagnosis that cuts across a number of character styles.

By contrast, when the ORSCD measure was applied to the Rorschach, it was possible to distinguish the two borderline subtypes, but not the obsessive-paranoid borderlines from the schizophrenic patients. The thematic measure demonstrated that the obsessive-paranoid borderlines are much more similar to the schizophrenic patients than they are to the higher scoring hysterical-infantile borderlines. Thematic assessment was not able to substantiate significant object-relational differences between obsessive-paranoid borderlines and schizophrenics, suggesting that this subtype of border-

line pathology may sit closer to the psychotic border. Moreover, this borderline group displayed the greatest range of object representations implying that a further delineation within the obsessive-paranoid subgroup is necessary to successfully separate this disorder from schizophrenia. Spear and Sugarman (1984) concluded that the use of the structural or thematic approach alone leads to incomplete findings.

A MULTIDIMENSIONAL ASSESSMENT PARADIGM

Based on the preceeding discussion, it is clear that a number of other sources, in addition to the Rorschach, should be considered in order to provide a more effective assessment of the multiple qualities of internalized object relations. This may be accomplished by also incorporating information obtained through early memories, interpersonal styles, and various object relations measures, since research has shown that borderlines may differ among various dimensions of object relations. This is the multidimensional assessment paradigm suggested in the present investigation. We now discuss the different components assumed under the proposed paradigm (Figure 1).

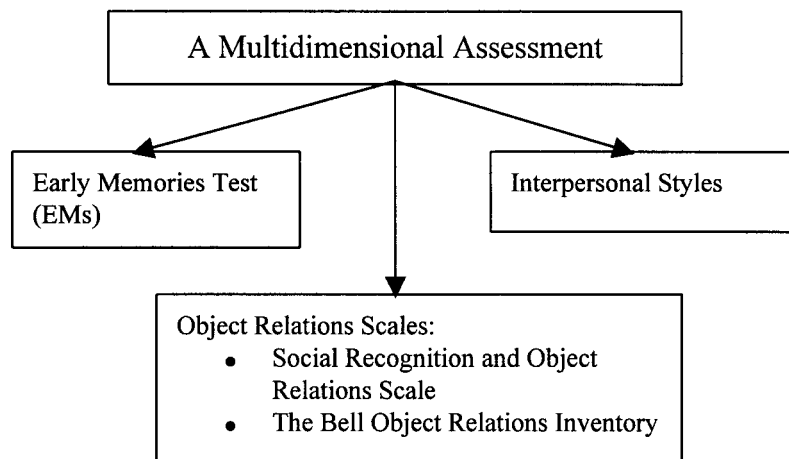


FIG. 1. Multidimensional Assessment Paradigm

Early Memories (EMs)

Mayman (1968) proposed that an individual's character structure is organized around object-relational themes that projectively intrude into the structure and content of one's EMs. It would seem possible then to extract from one's EMs intrusive interpersonal themes that define that person's enduring view of the self and ongoing expectations of others. In this context, it could be said that autobiographical EMs provide access to the focal issues that shape the individual's experience of the self in relation to others (Bruhn, 1990).

The findings from the early memory studies revealed that malevolent representations were significantly more evident in the EMs of borderlines. EMs could also be effectively used to distinguish BPD from other severe disorders. Nigg, Lohr, Westen, Gold, and Silk (1992), utilizing Mayman's Early Memory Tests (EMT), were able to use EMs to diagnostically discriminate borderlines from depressives and normals. Borderline subjects also produced significantly more memories involving deliberate injuries than comparison subjects. Arnow and Harrison (1991) compared the affect associated with seven early memories of patients with BPD, paranoid schizophrenia, and neurotic character pathology. They concluded that borderline patients had significantly fewer positively toned EMs than either neurotics or paranoid schizophrenics. In addition, borderlines tended to experience more memories of difficulty tolerating separations from others (Reich and Zanarini, 2001).

Object Relations Scales

Social Cognition and Object Relations Scale (SCORS)

As noted above, the EMT has been shown to have discriminant validity across some psychiatric disorders. However, as a diagnostic entity, borderline patients have been found to differ considerably on various object-relational dimensions. Using the Social Cognition and Object Relations Scale (SCORS), Westen, Ludolph, and colleagues (1990) identified patients with BPD and major depression. In this study, nearly half of the borderlines produced multiple representations receiving scores of Level 4 or 5 on the Complexity of Representations of People subscale. This indicates a capacity for complex cognitive representations, as suggested earlier. The remaining borderline subjects presented with simplistic or unidimensional representations as reflected in their Level 1 responses. Therefore, the cognitive structure of borderline object representations may be characterized by two opposite forms of pathology. These findings suggest that some borderline

patients may have a tendency to represent people in primitive and pre-oedipal ways. Yet, other borderline patients may have a tendency to represent people in an overelaborated and more cognitively and emotionally sophisticated manner.

One study (Ackerman, Hilsenroth, Clemence, Weatherhill, and Fowler, 2001) examined the convergent validity between the Rorschach's Mutuality of Autonomy (MOA) scale and Thematic Apperception Test (TAT) ratings used by the SCORS regarding borderline object representations. The authors concluded that borderlines with lower SCORS Affect rating (i.e., more malevolent expectations) may have more disturbed and enmeshed object representations.

The Bell Object Relations Inventory

In addition to the EMT and the SCORS, the quality of the object relations of borderline patients have been assessed by the Bell Object Relations (OR) Inventory. The Bell OR Inventory was empirically assessed by Bell, Billington, Cicchetti, and Gibbons (1988), who investigated differences in object relations among borderline patients. They were able to show, using the Bell OR Inventory, that subjects who met the DSM-III-R criteria for BPD had a clearly identifiable pattern of object-relational deficits. These deficits were distinguishable from subjects with affective, schizoaffective, and schizophrenic disorders. They found that the internal experience of alienation (lack of intimacy and loss of basic trust in interpersonal relationships) described by the Alienation (Aln) subscale, was the most common feature of BPD.

Similarly, they found that some borderline subjects had profound disturbances displayed through the Aln and Insecure Attachment (IA) subscales in the absence of high egocentricity needs. This suggests that these subjects are less likely to be as demanding and manipulative as other borderlines. Other borderline subjects had elevated Aln and Egocentricity (Egc) scales in the absence of insecure attachments. This may imply that these subjects would be less likely to agonize over relationships, but would be more coldly manipulative and mistrustful (Bell et al., 1988). Thus, studying differences in object-relational pathology of borderline patients can be useful in understanding and treating the range of pathological behaviors within this population.

In sum, BPD is a broad, but distinct diagnosis. Object relations assessment has demonstrated that as a group, borderlines perform equally on some psychological dimensions but differ on others. Patients diagnosed with BPD seem to share object-relational dimensions that are notable for a lack of interpersonal trust and a sense of alienation from others (Bell et al., 1988). The second commonality is an internal structure characterized by a

highly malevolent object world (Arnow & Harrison, 1991; Nigg et al., 1992; Nigg, et al., 1991; Stuart et al., 1990; Westen, 1990; Westen, Ludolph, Silk, et al., 1990).

Interpersonal Styles

Another area that should be included in the multidimensional paradigm is interpersonal style, to refer to the various ways the individual organizes his/her responses to the world around, especially the interpersonal world. Our study therefore attempted to demonstrate that interpersonal subgrouping of borderline psychopathology mirrors qualitative differences in object representations. This is a critical issue because unlike any other DSM-IV Personality Disorder diagnosis, the interpersonal style of BPD patients is not unidirectional. More than any other personality disorder, BPD has been correlated with various personality traits (Grinker, Werble, and Drye, 1968; McGlashan and Heinssen, 1989; Spear and Sugarman, 1984). The hallmark symptom among these varying traits is a profound disturbance in interpersonal relationships. Therefore, taxonomy of interpersonal traits is particularly relevant and may be helpful in building boundaries around the BPD diagnosis.

We chose to use Horney's (1937, 1945, 1950) conceptualization regarding the development of three basic character structures because we found that it provided a good theoretical foundation to explain why the BPD diagnostic entity appears to be so diffuse in its character descriptions. Horney put forward a theory that suggests that character trends are largely influenced by one's early relationships with others. Depending on the type of parental environment, the child learns to cope with fears of "basic hostility" and "basic anxiety" in one of three ways: moving toward people (the self-effacing solution), moving against people (the expansive solution), or moving away from others (the solution of resignation; Horney, 1950).

Based on this conceptualization, we assess the following hypotheses: (a) Borderline patients will not significantly differ in the object-relational dimensions of Alienation and Malevolence (Affect-tone) among themselves but will differ from nonborderline psychiatric patients. (b) It is expected that subgroupings of borderline patients will be identified by differences on structural (Complexity of Representations and Social Causality) and thematic (Attachment and Egocentricity) dimensions. Namely, the subgroup who primarily *turns away* from others will represent the borderline patients who are closest to the psychotic spectrum. This subgroup of borderlines will manifest a globally significantly more deficient self and other representational profiles than the other borderline subgroups. Higher Egocentricity and Social Competency scores will be found for the subgroup of border-

lines who consistently *turn against* others as compared with the other subgroups. Finally, borderline subjects who *turn toward* others will also manifest similar levels of egocentricity, but within the context of intense and insecure longings for attachment. Complexity of Representations of others is likely to be most developed in this subgroup as compared with other subgroups.

METHOD

Subjects

Eighty-four subjects who were thought to have BPD or some borderline traits by the referring clinician were referred to participate in the study. All subjects were recruited from two psychiatric outpatient departments, one day hospital and two inpatient units. Four subjects were not included based on exclusion criteria (one subject met DSM criteria for schizophrenia, two for organic personality disorder, and one for severe physical complications). Only two subjects were unable to complete the measures, and both had already been dropped from the study based on exclusion criteria. An additional four subjects were excluded from the study because they clearly met criteria for schizotypal personality disorder. The remaining 72 subjects were either clearly borderline patients ($N = 57$) based on DSM-IV criteria or nonborderline psychiatric patients ($N = 15$) that made up the psychiatric control group. The BPD subjects obtained 78 percent or greater on the Diagnostic Interview for Borderlines-Revised (DIB-R; Gunderson and Zanarini, 1983). We also found that all of the borderline subjects who obtained a 7 or greater on the DIB-R also met DSM-IV criteria for BPD ($N = 61$). The 15 non-BPD subjects scored five or below on the revised DIB-R and were diagnosed with a variety of Axis I and II disorders, such as bipolar disorder (5 subjects), schizoaffective (3 subjects), substance abuse (4 subjects), major depression (2 subjects), and atypical psychosis (1 subject). Some of these patients were also diagnosed with narcissistic, antisocial, and mixed personality disorder. The purpose of the comparison group was to assess if each BPD subgroup can be differentiated from psychiatric patients in general.

The subjects in the borderline and comparison groups ranged in age from 24 to 62. Thirty-seven were female and 35 were male. A majority of the subjects were drawn from a veteran's hospital, explaining the higher than usual sample of males to females diagnosed with BPD. Demographic (gender, age, occupation, socioeconomic, significant other, and educational status), situational (treatment setting, living arrangement, trauma history, psychoactive medication, and drug use), and state variables (presenting

symptoms and severity ratings from 1 = mildly upsetting to 5 = totally incapacitating) were collected because of their potential importance in analyzing the data.

Procedure

All subjects were initially given the DIB-R to assess for diagnosis. Once subjects met criteria for BPD, a series of objective and projective measures were given in order to further define the BPD group. They were given the Bell OR Inventory, and the interpersonal section of the DIB-R was further analyzed. Based on this analysis, subjects were categorized according to Horney's concept of basic interpersonal styles: Moving-Against, Moving-Away, and Moving-Towards others (see the appendix). Among the BPD subjects, 24 qualified as Moving-Against, 18 as Moving-Towards, and 15 as Moving-Away.

Subjects were also administered the Social Cognitive and Object Relations Scale (SCORS) and the Early Memory Test (EMT). EMs were obtained from the subjects with the following instructions:

I would like you to think back to when you were a small child and try to recall your earliest memories. Please write down the first thing that you remember happening. Describe the scene in detail. Do not write something that someone told you about, but what you remember happening. Once you finish, please answer the following questions.

The subjects were then asked questions geared at clarifying the ages at which the earliest memory occurred, the clearest aspect of each EM, the feelings associated with it, and, if necessary, suggestions to expand on what was happening in the memory. Below this set of clarifying questions, the subjects were instructed to respond in the same manner, providing their next earliest memory and then their earliest memory of mother and father.

Instruments

Diagnosis

The DIB-R is a semistructured interview divided into four sections thought to be of clinical importance in diagnosing BPD: affect, cognition, impulsive action patterns, and interpersonal relationships. The DIB-R was used because it is the most influential diagnostic instrument designed solely to identify patients with BPD (Zanarini, Gunderson, Frankenburg, and Chauncey, 1989). A cut-off of 7 instead of 8 was chosen because the DIB-R relies heavily

on symptoms of impulsiveness and psychotic regression. In an outpatient population these symptoms were expected to be less prominent, thus possibly challenging the validity of the DIB-R in an outpatient setting (Koenigsberg, Kernberg, and Schomerr, 1983). A cut-off of 7 on the DIB-R has a sensitivity of .82, a specificity of .80, a positive predictive power of .74, and a negative predictive power of .87 (Zanarini et al., 1989). Inter-rater reliability of .71–.81 and test-retest reliability of .71 have been reported in the literature (Zanarini et al., 1989).

Interpersonal Style

As noted earlier, interpersonal style was assessed by the interpersonal section on the DIB-R. High scores on this section generally reflect sadism, superiority, and vindictiveness. These characteristics, as defined by Horney, are reflective of the expansive style of those borderlines who consistently Moving Against Others. Items that reflected urgent dependency, excessive compliance, overconsideration, and subordination of the self were used to define the subgroup Moving Toward Others. Disproportionately high scores on items suggesting isolation, detachment, and intense social anxiety were characteristic of the Moving Away from Others subgroup. Borderline subjects who endorsed items that overlapped, such as demandingness, manipulation, and self-abnegation, were subjectively categorized by the examiner and referring clinicians into one of the three subgroups based on the assumed underlying motivation for these symptoms. For example, if the overlapping symptoms were determined to be due to a need for affection, the subject was placed in the Moving Toward subgroup. If the symptoms were thought to be motivated by a need for control, she or he was placed in the Moving Against subgroup; and if motivated by a need for withdrawal, the Moving Away subgroup.

Reliability of interpersonal style estimates among the borderline groups were calculated, using the Kappa (K) statistic, between the subgroup criterion items and the clinical judgment of the referring clinician. The observed kappa ($K = .789$) was significant at the $p < .001$ level for 48 out of 61 protocols. The agreement rates for the three subtypes were: 82% (Moving Toward), 74% (Against), and 80% (Away). The 13 protocols involving disagreements were assigned to subgroups according to their scores on the interpersonal items of this study.

Object Relations

By utilizing a multidimensional scoring assessment and two methods to assess object relations, it was hoped that subgroupings of BPD could be

more reliably identified. The current research study assessed object-relational development and pathology using the Bell OR Inventory and through a comprehensive analysis of EMs using the SCORS.

The Bell OR Inventory

The Bell OR Inventory was used to compensate for suspected biases encountered when scoring data from projective measures. The Bell OR Inventory was also used to measure object relations in BPD subjects. The Bell OR Inventory contains 45 true/false items that represent a range of object relational paradigms and interpersonal beliefs (Bell, Billington, and Becker, 1986). The measure is divided into four subscales derived from factor analysis: Alienation (Aln), Insecure Attachment (IA), Egocentricity (Egc), and Social Incompetence (SI). Elevated scores of $T > 60$ are considered pathological for all dimensions of object relations. A number of studies utilizing the Bell OR Inventory have demonstrated discriminant, concurrent, and predictive validity among psychiatric diagnostic groups (Bell et al., 1986; Bell et al., 1988). The Bell OR Inventory has also been successfully used as an outcome measure in various clinical studies (Engelman, 1985).

The subscales of the Bell have demonstrated good to excellent levels of split-half reliability and internal consistency. The subscales have shown to be generally free of response bias due to age, sex, or social desirability, and have low correlations with measures of symptoms and manifest dysfunction (Bell et al., 1986). Test-retest reliability of the Bell is consistent with other well-established psychological measures.

Early Memories Test

Four early memories from each subject were collected using a modified version of Mayman's Early Memories Test (EMT) (Mayman, 1968). The EMT has been used successfully both clinically and in research as a projective test for assessing character structure (Stricker and Healy, 1990). The test was shortened from 14 to 4 memories. All memories were written out by each subject. The effectiveness of the modified version and the self-administered form have been demonstrated in several studies (Acklin, Bibb, Bozen, and Jain, 1991; Westen, 1990).

Social and Object Relations Scale

Self and object representations were assessed using the Social Cognition and Object Relations Scale (SCORS; Westen, Barends, Leigh, Mendel, and Silbert, 1990) to quantitatively and qualitatively evaluate each subject's EM.

This measure was derived from clinical observation, object relations and social cognition theory, and empirical research (Westen, 1990). The SCORS focuses on four dimensions of object relations derived from various forms of projective and nonprojective data (Nigg et al., 1992; Stuart et al., 1990; Westen, Barends, et al., 1990): (a) complexity of representations of people (tendency to represent people in rich and elaborate ways and to distinguish clearly their subjective experiences); (b) affect-tone of the relationship paradigms (affective quality of the object world, ranging from malevolent to benevolent); (c) capacity for emotional investment in relationships and morals (need-gratifying orientation to the object world versus investment in values, ideals, and committed relationships); and (d) understanding social causality (tendency to attribute causes of behaviors, thoughts, and emotions in complex, logical, accurate, and psychologically minded ways).

Each dimension is assessed with a five-level scale, except the first dimension, which is based on a 7-point scale. Within each of these levels, hierarchical progressions were scored. For example, a Level 3 Understanding Social Causality could range from 3.01 to 3.12. All of the dimensions, with the exception of affect-tone, measure developmental levels of internalized object relations. Lower level scores represent a deficiency in that dimension of object relations.

The four dimensions comprising this measure have been validated in several ways. For instance, they have been shown to correlate highly with developmental object-relational theory, with clinician and self-reported ratings of psychological and social adjustment, and have effectively predicted various criterion groups among different diagnostic categories (Westen, Ludolph, Silk et al. 1990). Factor analytic and treatment manipulation validity studies on this measure are needed. Westen, Barends, and colleagues (1990) report an inter-rater corrected reliability coefficient of .91 for complexity of representations of people, .93 for affect-tone, .87 for capacity of emotional investment, and .95 for social causality.

Coding

Each EM was coded using the SCORS. When scoring the EMs, the experimenter was trained in coding the memories and was blind to the group and scores on other memories and measures. The Bell OR Inventory was hand scored. Nevertheless, results of the multivariate ANOVA demonstrated highly significant differences between the two groups on the eight object-relational dimensions, $F(14, 69) 5.13, p < .000$. A MANOVA was computed because of the interrelationship among the dependent variables (Bartlett test of sphericity = 139.0, 28 d.f., $p < .000$). If multiple ANOVA, the likelihood of Type I errors may have been inflated.

RESULTS

Initial analyses were conducted through chi-square analyses (ANOVA for age), which showed that significant differences did not exist between the borderline and nonborderline group on any demographic variables. Therefore, none of these variables were used as covariates. Sexual abuse and a combination of different types of abuse, including sexual mistreatment, were elevated in the BPD subjects as opposed to the comparison sample (51% to 21%). However, significant differences did not exist across the borderline groups.

Marital status differed among the borderline subgroups. Thirty-three percent of those borderlines in the Moving Away group were married; none of the Moving Against and only four percent of the moving toward borderlines were married. An ANCOVA was computed using marital status as a covariate. This analysis showed that marital status did not influence the dependent variables. Substance abuse histories also differed across the three subgroups. Frequent substance use was found in the Moving Against group (54% of this group), but was not used as a covariate, because it was thought to be irrelevant to the purpose of this study.

The various assumptions necessary to conduct an ANOVA were tested. Normal distribution among the dependent variables was not violated (skewness < 2.31), and univariate and multivariate homogeneity of variance were equal for each of the dependent variables (Cochran's $C(17, 4) = p > 1.0$; Box's $M(F) = 1.1, p = .12$), with the exception of Social Causality (Cochran's $C(17, 4) = p < .03$). This variable was transformed using logarithmic transformation to meet the univariate homogeneity of variance assumption. Multicollinearity and singularity among the dependent variables were not evident based on the correlation matrixes.

It was predicted that the scores on the Alienation and Affect-tone subscales would differentiate the three borderline groups from the psychiatric control group. This hypothesis was supported, Alienation, $F(1, 69) = 50.0, p < .000$; Affect-tone, $F(1, 69) = 22.8, p < .000$. Variables that may have influenced this finding, such as Axis I diagnosis (e.g., degree of depression, anxiety) and relationship status, were equivalent between the borderline and control group.

Contrary to the first hypothesis, scores on the Social Incompetence subscale also differentiated BPD from non-BPD patients, $F(1, 69) = 33.9, p < .000$. The Social Incompetence measure is sensitive to interpersonal anxiety, an experience that all borderline patients shared in this study.

Table 1 presents the means, standard deviations, and analysis of variance for the eight dimensions of the Bell and the SCORS across the four groups. Each of the significant main effects (overall F statistics) was followed up

TABLE 1. Standard Deviations. Univariate Statistics for the Eight Object-Relations Measures

Variables	Toward (n = 18)	Against (n = 24)	Away (n = 15)	Control (n = 15)	F (3, 68)
Alienation	26.7 (7.0)	27.9 (6.1)	22.8 (5.8)	12.4 (6.5)	21.4**
Attachment	18.14 (4.2)	16.9 (3.9)	12.8 (3.9)	9.5 (4.2)	15.6**
Egocentric	11.6 (4.5)	12.6 (3.1)	10.0 (4.7)	6.3 (4.3)	7.7*
Incompetence	9.9 (4.4)	8.2 (3.0)	9.3 (3.4)	2.8 (2.4)	13.9**
Affect-Tone	2.1 (.45)	1.9 (.42)	2.2 (.56)	2.8 (.41)	10.6**
Complexity	2.2 (.41)	2.0 (.39)	1.8 (.43)	2.4 (.52)	4.8
Investment	2.3 (.37)	1.8 (.28)	2.0 (.35)	2.3 (.48)	8.1
Causality	2.1 (.31)	1.9 (.37)	1.8 (.44)	2.4 (.60)	6.3**

Note: Standard deviations are shown in parentheses.

* $p < .004$. ** $p < .001$.

with simple effect analyses to test the three remaining primary hypotheses. A modified LSD (Bonferroni) analysis was chosen to reduce the likelihood of false positives ($p < .05$).

The Moving Away Subgroup

These borderline patients were expected to display wide spread structural (cognitive) and thematic (affective) object-relational deficiencies. It was hypothesized that the cognitive indexes (Complexity of Representation and Understanding Social Causality) would be significantly lower than the other three groups. This hypothesis was partially supported.

On the Complexity of Representations of People dimension, the subjects in the Moving Away subgroup were less successful in differentiating projective aspects of the self from others. However, this deficit of complex representations was only significant in comparison to nonborderlines and borderlines who move toward the other. The unidimensional and unstable representations of these subjects were not significantly different from those borderlines who move against others. The second cognitive attribute, Understanding Social Causality, did not differentiate this subgroup from the other BPD groups, only from the non-BPD controls.

On the thematic measures, as suspected, the detachment defense of the Moving Away borderline was reflected in their low Insecure Attachment scores. These scores were significantly lower than the other borderline groups. However, the Moving Away borderlines' scores on the Egocentricity and Emotional Investment in Relationships and Morals indexes did not significantly differ from the three groups.

To summarize, one cognitive-structural variable significantly discriminated the Moving Away borderlines among the other BPD subgroups and one affective-thematic variable differed among the borderline subgroups.

The Moving Against Subgroup

It was predicted that these borderline patients could be discriminated from other borderlines by their high egocentricity and social competency scores. On the Egocentricity scale this group significantly differed only from the non-BPD group. However, on a projective measure of self-interest and emotional commitment to others (Investment), they could be differentiated from the Moving Toward BPD group. Unexpectedly, the Moving Against subgroup did not differ from the other borderline groups on the Bell's Social Incompetence scale. This corresponds to Bell et al. (1988) findings that disproportionately low SI scores are typically found in antisocial and narcissistic personalities who have a self-perception of being able to "con others." Although grandiose trends existed in this group, they were not found to be significant (Table 1).

To summarize, only one variable, Emotional Investment, an affective-thematic variable, significantly differentiated the Moving Against BPD subjects from the other BPD subgroups.

The Moving Toward Subgroup

This subgroup of patients was expected to manifest higher egocentric scores than the other subgroups, but within the context of intense and insecure longings for attachment. Insecure Attachment scores for this subgroup were significantly higher than the non-BPD and Moving Away subgroups, but not in contrast to the Moving Against borderlines. As suspected, Egocentricity scores were equal to the Moving Against subgroup. The level of Emotional Investment in Relationships and Morals for this subgroup, however, was significantly higher than the Moving Against and non-BPD groups. Surprisingly, the Moving Toward borderlines could not be significantly differentiated from the Moving Away group on this scale.

Complexity of Representations of others were anticipated to be most developed in this subgroup. This was true, but significant differences were limited to comparisons between the Moving Away and control groups. However, trends indicating significant differences between the Moving Toward and Against subgroups are evident, $t = 2.0$, $p < .06$. On another structural object relations attribute (Understanding Social Causality), the Moving Toward subgroup was differentiated only from the psychiatric control group.

To summarize the Moving Toward data, only one cognitive-structural attribute and one affective-thematic attribute were useful in differentiating among the BPD subgroups.

Analysis of Gross Indexes Scores

Using an overall object relations index score, borderlines could only be successfully discriminated from the psychiatric subjects on their second earliest memory. The borderline subjects in the Moving Against group had the lowest scores, separating them from the non-BPD group on the earliest memory and earliest memory of father. In brief, using an overall object relations score was only useful in discriminating the Moving Against borderlines from those who move toward the other on the EM of father.

In sum, as evident from Table 1 and the highly conservative simple effects analyses, a multidimensional assessment of object relations is a sensitive method, adding to the psychodiagnostician's ability to differentiate among the object representational world of BPD patients. Table 2 demonstrates that an overall developmental score, across thematic and structural dimensions, is not as sensitive in comparison to analyzing affective-thematic and cognitive-structural variables.

DISCUSSION

The data from this study is promising in that it supports prior studies using psychological assessment to successfully discriminate BPD from other forms of severe psychopathology. It is also promising that the data lends some support and encouragement that subgroups of BPD can be identified. The results from this study show that BPD subgroups can be separated not only by their predominant interpersonal style but also through an analysis of their underlying internal object world.

Similar to Kernberg's conceptualization of borderline personality organization, the findings from this study support BPD as disorder of object rela-

TABLE 2. Analyses of EMI

Variables	Toward (n = 18)	Against (n = 24)	Away (n = 15)	Control (n = 15)
EM	2.2 (.35)	1.9 (.31)	2.1 (.50)	2.5 (.35)
Next EM	2.1 (.33)	1.9 (.35)	1.9 (.33)	2.4 (.38)
EM/mother	2.1 (.38)	1.9 (.39)	2.1 (.43)	2.4 (.41)
EM/father	2.3 (.40)	1.9 (.32)	2.0 (.30)	2.5 (.44)

Note. Standard deviations are shown in parentheses.

tions that cuts across different personality styles. This study suggests that underlying these three interpersonal solutions of BPD patients (moving away, against, and toward) are differences in the object-relational dimensions of Insecure Attachment, Complexity of Representations, and Emotional Investment in Relationships and Morals.

Most of the hypotheses of this study were supported. The findings support that the internal world of the borderline patient is highly malevolent (Affect-tone). We concur with the findings from other studies suggesting that the highly malevolent object world of borderlines is useful in distinguishing BPD from nonborderline patients (Arnow & Harrison, 1991; Nigg et al., 1991; Nigg et al., 1992; Stuart et al., 1990; Westen, 1990; Westen, Ludolph, Silk, et al., 1990). The group of borderline patients in our study also shared similar feelings of intense alienation from others, as assessed by the Alienation index of the Bell. These findings are consistent with the results of Bell and colleagues (1988) and with some of the general descriptions of borderline phenomenon. Whether one adheres to a more classical view that manifestations of malevolence (such as hate, anger, and rage) are components of excessively aggressive drives (Kernberg, 1975; Klein, 1952/1975), or a more self-psychology view emphasizing a deficiency of good self-other internalizations (Buie and Adler, 1973; Fairbairn, 1952; Kohut, 1971), a dangerous inner world has been suggested to be fundamental to borderline psychopathology.

Competing theoretical models of borderline personality, however, have emphasized different phenomena when describing the core of borderline psychopathology. The fundamental psychopathology of the borderline personality for Kernberg is aggression, for Buie and Adler it is the intolerance of aloneness, and for Masterson it is the inability to activate the real self. The utility of these theoretical models may be best implemented with different subtypes of borderline pathology. This study uses aspects from three object relations models, Kernberg, the self-representational deficit model, and the ego-deficit model to explain the different presentations of borderline patients across the three subtypes.

The Moving Away Subgroup

The Moving Away borderlines were similar to other borderlines on one of the structural dimensions (Understanding Social Causality). On the structural dimension, Complexity of Representations, they were less developed than the moving toward borderline patients. One way to understand some of the data from the cognitive object-relational indexes of the moving away subgroup is that the results from this subgroup are consistent with Blanck and Blanck's (1979) global ego deficit model of borderline pathology. Spe-

cifically, that ego (structural) deficits are likely to be more prevalent in those patients who manifest a significant lack of differentiation of self from other. From a developmental object relations standpoint, this could suggest that engulfment fears may be more prevalent for the Moving Away borderlines than for the other subtypes. Similarly, Giovacchini (1979) suggested that borderline ego functioning that organizes around engulfment, as opposed to abandonment fears, is more vulnerable to undifferentiation.

The findings from the Moving Away borderline subgroup also converge with Grinker and colleagues' (1968) classification of their group 1 borderline subtype. The group 1 borderlines demonstrated more frequent thought disturbances and their self and object boundaries were the weakest. In our investigation, the negativistic and egocentric behavior of the moving away subgroup would separate these borderlines from the "as if" (group 3) patients in Grinker's study.

As expected, the thematic variables showed that the Moving Away borderlines appear to have a diminished attachment drive that is guided by egocentric aims, as indicated by their low IA scores and relatively elevated Egcn index. In addition, they were similar to the other borderline subgroups in harboring malevolent expectations about an unpredictable social world.

Although Fairbairn's (1952) object relations theory was not formulated specifically from working with borderline patients, it may be useful in providing some understanding of these findings. Fairbairn's conceptualization refers to a process in which the more schizoid patient, who shared many similarities to the Moving Away borderlines, wants attachment but fears destroying the object. Within the psyche of patients with schizoid features, there is a relative balance between the dependent longings of what Fairbairn called the "exciting object" and the hostile attacks of the "rejecting internalized object." Similarly, this subtype of borderline personality may attempt to withhold its negative projections by isolating from real relationships. Deep beneath their detachment defense, would lie the object hungry and rejecting part-objects. The extent that these exciting and rejecting objects are split off determines if interpersonal relationships are altogether abolished, as is the case in schizoid conditions (Guntrip, 1961).

The Moving Against Subgroup

Based on the results from the Emotional Investment in Relationships and Morals subscale, the Moving Against borderlines generally appear to be the least likely to be concerned about the other when in a relationship. This borderline subtype seems to share many of the characteristics of the one of

the BPD subgroups described in Grinker et al.'s (1968) study. These authors described the group 2 BPD patients as being more resentful, bitter, and likely to present with more narcissistic-like traits than other borderline subtypes. It seems that Kernberg's (1975, 1984) description of the borderline patient share many similarities with the Moving Against subtype.

The large overlap of the Moving Against subtype with the other subgroups may explain Kernberg's view that patients with borderline personality organization share a common intrapsychic core. As finer discriminations become available in object relations assessment, however, sharper delineations among and within character disorders may be possible.

Additionally, aspects from Fairbairn's theory may provide another way to interpret the findings from the EI variable of the Moving Against subgroup. The intrapsychic world of the Moving Against borderline, more so than other BPD borderlines, may be largely consumed by an internalized "rejecting object." This borderline subtype may have less hope and desire to merge with that "all good" external object (Seinfeld, 1990). Children and adults controlled by this ego state are suspected of being filled with rage and feeling hateful most of the time (Cashdan, 1988). Using Fairbairn's terminology, Celani (1993) suggested that the early environment of this subgroup may have been so depriving that the antilibidinal ego becomes oversupplied with toxic memories.

THE MOVING TOWARD SUBGROUP

Specific dimensions within the object relations profile of the Moving Toward group were predicted to differ from the other borderline subtypes. As expected, the level of self-other differentiation (the Complexity variable) and longing for attachment (the IA variable) in these borderline patients are more pronounced than the Moving Away borderlines. This finding partially supports Kernberg (1984) and Masterson & Rinsley's (1975) theories that the object-seeking borderline is closer to the neurotic border than those who detach and withdraw. However, complex representations of others were not significantly different from the Moving Against subgroup as had been initially expected. This finding does not support the results from previous research indicating that some borderline patients obtain neurotic-level scores on certain object relations dimensions (Westen, 1990). This sample of borderline subjects, despite differences on specific object-relational indexes, consistently obtained scores reflective of primitive levels of development. One explanation for this finding may be that borderline psychopathology was more narrowly defined in this study in comparison to others.

The Moving Toward subgroup, however, differed from the Moving Against

borderline patients on another dimension. It was shown that the Moving Toward subgroup needs for self-gratification were less prominent than the other subgroups. This was true only on the EI variable and not on Egocentricity, suggesting that either EI is a more sensitive measure of self-gratification or that these two dimensions are not related to self-gratification in the same way.

An unexpected finding was that the scores of the Moving Toward BPD subgroup on IA were not higher than the Moving Against subtype. This finding lends some support to Bell et al.'s (1988) conclusions that elevated IA scores in combination with high Alienation scales are frequently seen in many borderline patients; whereas, single IA elevations are commonly associated with higher functioning personality disorders (e.g., Avoidant, Compulsive, and Dependent).

In Fairbairn's theory, the Moving Toward borderline patients, given their interpersonal style, could be conceptualized as being consumed in searching for that fantasy-dominated external object. Problems with aggression seem to be secondary. That is, aggressive rage occurs in reaction to perceived or real loss of the external object. The Moving Toward borderline subtype appears to fit best with the model of BPD etiology that Buie and Adler (1973) describe. They believe that borderline patients have an inability to maintain a positive internal soothing image; what they call a "holding introject." In this subtype, the other is used to contain their abandonment fears. Inevitably, these BPD patients may feel they are not being "held" enough, and they in turn reject those who they perceived have rejected them. Thus, the attacking of others, derivatives of the rejecting object, perpetuates the wish to be held only by the original frustrating objects (Celani, 1993).

Implications of Findings

The results from this research add to the growing body of literature (Blatt and Lerner, 1983; Greene, 1996; Knox, 1997; Nigg et al., 1992; Nilsson, 1995; Spear and Sugarman, 1984; Stuart et al., 1990; Westen, Ludolph, Lerner, Puffins and Wiss, 1990) providing strong support for a multidimensional approach to the assessment of internalized object relations. Using this approach, boundaries can be better defined separating BPD from similar psychopathological conditions. In addition, subcategories within the borderline diagnosis can be identified. Creating subgroups allows for greater precision in delineating the Moving Toward borderlines from higher functioning histrionic and dependent personalities. Similarly, the Moving Against borderlines may successfully be discriminated from antisocial and narcissistic disorders, and the Moving Away borderline patients from simi-

lar character typologies, such as the avoidant, schizoid, and schizotypal personalities.

Additionally, identifying the predominant interpersonal style of a borderline patient could provide greater flexibility in choosing an appropriate treatment approach. As indicated in the previous section, each of the three borderline subgroups could be matched to treatment models that best fit with their specific intrapsychic organization. For instance, the developmental, self, and object relations approach of Masterson (1990), or Adler's (1985) treatment orientation, appears to fit better with the object-needy Moving Toward borderline patient. The higher narcissistic scores obtained from the Moving Against BPD subgroup implies that Kernberg's aggression model of borderline psychopathology may be most appropriate when working with this subtype.

Spear and Sugarman (1984) also discussed possible treatment approaches of the obsessive-paranoid borderline. This approach may have applicability to the Moving Away borderlines. The low developmental differentiation score, from the SCORS of the Moving Away group, appears to correlate with the equally low differentiation score, using the Rorschach, of the obsessive-paranoid borderline group. Spear and Sugarman suggested that the obsessive-paranoid subtype would presumably have a worse prognosis in expressive psychoanalytic therapy because of their vulnerability to schizophrenic levels of internalized object relationships. They recommended a supportive treatment approach. A similar recommendation seems warranted for the Moving Away borderline subtype. These patients are least likely of all the borderline groups to engage in building a therapeutic alliance, good or bad.

CONCLUDING THOUGHTS

In general, research in object relations is limited by the inherent difficulty in operationalizing the construct. By definition, internalized object relations are an elusive entity. It is recognized that the instruments are not the concepts. No one knows the degree to which the measures used in this study assess the essence of pure self and object representations. Only future research with these instruments will lead to the development of some gold standard of measurement in the study of internalized object relations.

Although many of the findings converged with the data from recent investigations, the theoretical, diagnostic, and treatment implications of these results need further empirical validation with a larger sample size in order to contribute to a fuller understanding of borderline psychopathology. This is particularly the case because of the methodological complications faced in the implementation of the study. For instance, subjects could not be ran-

domly assigned to their groups. Thus, selection bias may have accounted for some of the variance that was thought to have been attributed to differences in object relations. Steps were taken to rule out these threats, such as accounting for presenting symptomatology and severity, but causal inference is not as strong if random assignment was possible.

Additionally, the research design would have probably been strengthened if a larger sample of control subjects were used and if these subjects were also grouped into one of the three interpersonal subtypes. This would have allowed for the comparison of all the object-relational dimensions across BPD and non-BPD subgroups. In addition, diagnostic information about the control group was not validated with a research measure. By subgrouping the comparison patients and adding a comprehensive diagnostic measure, finer discriminations among the borderline groups and the controls could have been conducted.

Finally, it is not clear if interpersonal style influences object relations, or whether object relationships influence interpersonal behavior. For example, there is some support in temperament literature that genetic factors may influence whether an individual or borderline patient seeks out or withdraws from others (Zuckerman, 2000). This, in turn, may prove to have very significant effects on one's internal representational world.

These deficiencies notwithstanding, we consider our findings important in better understanding the borderline subgroups' object representation and in encouraging future research. Indeed, the conclusions of this study raise several questions and issues that future research can pursue. It is becoming evident that object relations is not a singular concept. This is manifested in borderline patients by the disparity among different cognitive and affective object-relational dimensions. Future research could explore if object-representational profiles of these borderline subtypes are distinguishable from the same interpersonal subgroupings of other genetic disorders, such as schizophrenia or neurosis.

Ultimately, developmental theories will need to account for why some object-relational attributes are more developed than others. Integrating data from object relations research with other disciplines in psychology and the clinical neurosciences may further advance object relations theory. Empirical research in object relations has begun to clarify some of the confusion that surrounds the borderline diagnosis. A model of object-relational pathology that can explain the distinctiveness, as well as the diversity, of borderline personality is beginning to develop. Exploring the relationship between various developmental correlates and the different dimensions of object relations will hopefully have important prognostic and therapeutic implications for all borderline patients.

APPENDIX A: INTERPERSONAL SUBGROUP CRITERIA ITEMS FROM THE BELL OR AND DIB-R

The Moving Toward Borderline Subgroup

At least five of the following items had to be endorsed:

- If someone dislikes me, I will always try harder to be nice to that person.
- I tend to be what others expect me to be.
- No matter how bad a relationship may get, I will hold on to it.
- I often allow others to force me to do things.
- I need a lot of support and help in order to function.
- I tend to put people up on a pedestal and think of them of as unusually good or perfect.
- I never force people to do things that they don't want to do.
- I never demand things or ask too much from people.

The Moving Away Borderline Subgroup

At least four of the following items had to be endorsed:

- I would like to be a hermit forever.
- I like to be alone.
- I often feel like I would be smothered or lose my identity if I got to close to others.
- I have one or less, close relationships.
- I feel extremely anxious and self-conscious in social situations.
- When in social situations, I typically stay on the periphery.

The Moving Against Borderline Subgroup

At least 78% of the items in the interpersonal section the DIB-R had to be endorsed. Additional items included:

- I never allow people to force me to do things that I don't want to do.
- I feel I am owed things because of what I've been through.
- The most important thing to me in a relationship is to exercise power over the other person.

REFERENCES

- Ackerman, S. J., Hilsenroth, M. J., Clemence, A. J., Weatherhill, R., & Fowler, J. C. (2001). Convergent validity of Rorschach and TAT scales of object relations. *Journal of Personality Assessment*, 77, 295–306.

- Acklin, M. W., Bibb, J. L., Bozen, P., & Jain, V. (1991). Early memories as expressions of relationship paradigms: A preliminary investigation. *Journal of Personality Assessment*, 57, 177–192.
- Adler, G. (1985). *Borderline psychopathology and its treatment*. Northvale, NJ: Jason Aronson.
- Arnold, D., & Harrison, R. H. (1991). Affect in early memories of borderline patients. *Journal of Personality Assessment*, 56, 75–83.
- Bell, M. D., Billington, R., & Becker, B. (1986). A scale for the assessment of object relations: Reliability, validity and factorial invariance. *Journal of Clinical Psychology*, 42, 733–741.
- Bell, M. D., Billington, R., Cicchetti, D., & Gibbons, J. (1988). Do object relations deficits distinguish BPD from other diagnostic groups? *Journal of Clinical Psychology*, 44, 511–516.
- Blanck, G., & Blanck, B. (1979). *Ego psychology II*. New York: Columbia University Press.
- Blatt, S. J., Brennis, C. B., Schimek, J. G., & Glick, M. (1976). Normal development and psychopathological impairment of the concept of the object in the Rorschach. *Journal of Abnormal Psychology*, 5, 364–373.
- Blatt, S., & Lerner, H. (1983). The psychological assessment of object representation. *Journal of Personality Assessment*, 47, 7–27.
- Bower, G. H. (1990). Awareness, the unconscious, and repression: An experimental psychologist's perspective. In J. Singer (Ed.), *Repression and dissociation: Implications for personality, theory, psychopathology, and health* (pp. 209–231). Chicago: University of Chicago Press.
- Bruhn, A. R. (1990). *Earliest childhood memories: Vol. 1. Theory and application to clinical practice*. New York: Praeger.
- Buie, D. H., & Adler, G. (1973). The uses of confrontation in psychotherapy of borderline cases. In G. Adler & P. G. Myers (Eds.), *Confrontation in psychotherapy* (pp. 123–146). New York: Science House.
- Cashdan, S. (1988). *Object relations therapy: Using the relationship*. New York: W. W. Norton.
- Celani, D. P. (1993). *The treatment of the borderline patient: Applying Fairbairn's object relations theory in the clinical setting*. Madison, CT: International Universities Press.
- Chessick, R. D. (1974). Defective ego feeling and the quest for being in the borderline patient. *International Journal of Psychoanalytic Psychotherapy*, 3, 73–89.
- Cornell, D. G., Sild, K. R., Ludolph, P. S., & Lohr, N. E. (1983). Test-retest reliability of the diagnostic interview for borderlines. *Archives of General Psychiatry*, 40, 1307–1310.
- Engelman, E. (1985). *Level of object representation in depression: A longitudinal study*. Unpublished doctoral dissertation, Adelphi University.
- Fairbairn, W. R. D. (1944). Endopsychic structure considered in terms of object relationships. *International Journal of Psycho-analysis*, 25, pts 1 & 2.
- Fairbairn, W. R. D. (1952). *An object relations theory of the personality*. New York: Basic Books.
- Fairbairn, W. R. D. (1955). Observations in defense of the object relations theory of the personality. *British Journal of Medical Psychology*, 28, 144–156.
- Farris, A. A. (1988). Differential diagnosis of borderline and narcissistic personality disorders. In H. D. Lerner & P. A. Lerner (Eds.), *Primitive mental states and the Rorschach* (pp. 299–337). Madison, CT: International Universities Press.

- Faris, M. A. (1989). Differential diagnosis of borderline and narcissistic personality disorders. In H. D. Lerner & P. M. Lerner (Eds.), *Primitive mental states and the Rorschach* (pp. 299–337). Madison, CT: International Universities Press.
- Frosch, J. (1967). Psychoanalytic considerations of the psychotic character. *Journal of the American Psychoanalytic Association*, 15, 606–625.
- Gartner, J., Hart, S. W., & Gartner, A. (1989). Psychological tests signs of borderline personality disorder: A review of the empirical literature. *Journal of Personality Assessment*, 53, 413–441.
- Giovacchini, P. (1979). The many sides of helplessness: The borderline patient. In J. LeBoit & A. Capponi (Eds.), *Advances in psychotherapy of the borderline patient* (pp. 227–267). New York: Jason Aronson.
- Greene, L. R. (1996). Primitive defenses, object relations, and symptom clusters in borderline psychopathology. *Journal of Personality Assessment*, 67, 204–304.
- Grinker, R., Sr., Werble, B., & Drye, R. (1968). *The borderline syndrome*. New York: Basic Books.
- Gunderson, J. G., & Zanarini, M. C. (1983). *Diagnostic interview for borderlines-revised*. Unpublished manuscript.
- Guntrip, H. (1961). *Personality structure and human interaction: The developing synthesis of psycho-dynamic theory*. New York: International Universities Press.
- Horney, K. (1937). *The neurotic personality of our time*. New York: Norton.
- Horney, K. (1945). *Our inner conflicts*. New York: Norton.
- Horney, K. (1950). *Neurosis and human growth*. New York: Norton.
- Kernberg, O. (1975). *Borderline conditions and pathological narcissism*. New York: Jason Aronson.
- Kernberg, O. (1976). *Object relations theory and clinical psychoanalysis*. New York: International Universities Press.
- Kernberg, O. (1984). *Severe personality disorders: Psychotherapeutic strategies*. New Haven: Yale University Press.
- Klein, M. (1975). Some theoretical conclusions regarding the emotional life of the infant. In M. Klein (Ed.), *Envy and gratitude and other works, 1946–1963*. New York: Delacorte Press. (Original work published 1952)
- Knox, J. (1997). Internal objects—a theoretical analysis of Jungian and Kleinian models. *Journal of Analytical Psychology*, 42, 653–666.
- Koenigsberg, H. W., Kernberg, O. F., & Schomerr, J. (1983). Diagnosing borderline conditions in an outpatient setting. *Archives of General Psychiatry*, 40, 49–53.
- Kohut, H. (1971). *The analysis of the self: A systematic approach to the psychoanalytic treatment of narcissistic personality disorders*. New York: International Universities Press.
- Krohn, A., & Mayman, M. (1974). Objective representations in dreams and other projective tests. *Bulletin of the Menninger Clinic*, 38, 445–466.
- Lerner, H. D., & Lerner, P. M. (1983). Multiple dimensions of object relations in neurotic, borderline, and schizophrenic patients. In C. D. Spielberger & J. N. Butcher (Eds.), *Advances in personality assessment* (pp. 53–57). Hillsdale, NJ: Erlbaum.
- Lerner, H. D., & St. Peter, S. (1984). Patterns of object relations in neurotic, borderline and schizophrenic patients. *Psychigla*, 47, 77–92.
- Masterson, J. (1976). *Psychotherapy of the borderline adult: A developmental approach*. New York: Brunner/Mazel.
- Masterson, J. F. (1990). Psychotherapy of borderline and narcissistic disorders: Establishing a therapeutic alliance (A developmental, self, and object relations approach). *Journal of Personality Disorders*, 4, 182–191.

- Masterson, J. F., & Rinsley, D. B. (1975). The borderline syndrome: The role of the mother in the genesis and psychic structure of the borderline personality. *International Journal of Psychoanalysis*, 56, 163–177.
- Mayman, M. (1968). Early memories and character structure. *Journal of Projective Techniques and Personality Assessment*, 32, 303–316.
- McGlashan, T. H., & Heinssen, R. K. (1989). Narcissitic, antisocial and noncomorbid subgroups of borderline disorder. *Psychiatric Clinics of North America*, 12, 653–670.
- Nigg, J., Lohr, W., Westen, D., Gold, L., & Silk, K. (1992). Malevolent object representations in borderline personality disorder and major depression. *Journal of Abnormal Psychology*, 101, 61–67.
- Nigg, J. T., Silk, K. R., Westen, D., Lohr, W. E., Gold, L. J., Goodrich S., & Ogata, S. (1991). Object representations in the early memories of sexually abused borderline patients. *American Journal of Psychiatry*, 148, 864–869.
- Nilsson, A. (1995). Differentiation between patients with schizophrenia and borderline disorders in the Percept-genetic Object-Relation Test, PORT. *British Journal of Medical Psychology*, 68, 287–309.
- Reich, D. B., & Zanarini, M. C. (2001). Developmental aspects of borderline personality disorder. *Harvard Review of Psychiatry*, 9, 294–301.
- Seinfeld, J. (1990). *The bad object*. Northvale, NJ: Jason Aronson.
- Spear, W. (1980). The psychological assessment of structural and thematic object representations in borderline and schizophrenic patients. In J. Kwawer, G. Lerner, P. Lerner, & A. Sugarman (Eds.), *Borderline phenomena and the Rorschach test* (pp. 321–340). New York: International Universities Press.
- Spear, W., & Lapidus, L. (1981). Qualitative differences in manifest object representations: Implications for a multidimensional model of psychological functioning. *Journal of Abnormal Psychology*, 49, 157–167.
- Spear, W. E., & Sugarman, A. (1984). Dimensions of internalized object relations in borderline and schizophrenic patients. *Psychoanalytic Psychology*, 1, 113–129.
- Stone, M. H. (1980). *The borderline syndrome*. New York: McGraw-Hill.
- Stricker, G., & Healy, B. D. (1990). Projective assessment of object relations: A review of the empirical literature. *Psychological Assessment*, 2, 219–230.
- Stuart, J., Westen, P., Lohr, N., Silk, K., Benjamin, J., Becker, S., & Varus, N. (1990). Object relations in borderlines, major depression, and normals: Analysis of Rorschach human figure responses. *Journal of Personality Assessment*, 55, 296–318.
- Urist, J. (1977). The Rorschach test and the assessment of object relations. *Journal of Personality Assessment*, 41, 3–9.
- Westen, D. (1990). Towards a revised theory of borderline object relations: Contributions of empirical research. *International Journal of Psycho-Analysis*, 71, 661–693.
- Westen, D., Barends, A., Leigh, J., Mendel, M., & Silbert, D. (1990). *Social cognition and object relations scale (SCORS): Manual for coding interview data*. Unpublished manuscript.
- Westen, D., Ludolph, P., Lerner, H., Puffins, S., & Wiss, C. F. (1990). Object relations in borderline adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry*, 29, 338–348.
- Westen, D., Ludolph, P., Silk, K., Kellam, A., Gold, L., & Lohr, N. (1990). Object relations in borderline adolescents and adults: Developmental differences. *Adolescent Psychiatry*, 17, 360–384.
- Zanarini, M. C., Gunderson, J. G., & Frankenburg, F. R. (1986). *Diagnostic interview for borderlines-revised*. Unpublished manuscript.

- Zanarini, M. C., Gunderson, J. G., Frankenburg, F. R., & Chauncey, D. L. (1989). The revised diagnostic interview for borderlines: Discriminating BPD from other Axis II disorders. *Journal of Personality Disorders*, 3, 1018.
- Zuckerman, M. (2000). Personality & risk to King: Common biosocial factors. *Journal of Personality*, 68, 999–1029.